Appl. No. Filed 09/983,054

:

October 16, 2001

AMENDMENTS TO THE CLAIMS

1. (Previously presented) A pharmaceutical composition for treating or preventing an allergic reaction associated with increased IgE levels in a mammal comprising the following compounds:

Genus A,

wherein X and Y are independently selected from the group consisting of H, alkyl, alkoxy, aryl, substituted aryl, hydroxy, halogen, amino, alkylamino, nitro, cyano, CF₃, OCF₃. CONH₂, CONHR and NHCOR₁;

wherein R is selected from the group consisting of H, CH₃, C₂H₅, C₃H₇, C₄H₉, CH₂Ph, CH₂C₆H₄-F(p-), COCH₃, CO₂CH₂CH₃, aminoalkyl and dialkylaminoalkyl; and

wherein R_1 is a heterocyclic ring containing one heteroatom or substituted heterocyclic ring containing one heteroatom; and

wherein R₂ is selected from the group consisting of aryl, heteroaryl, thiophene, pyridyl, thiazolyl, isoxazolyl, oxazolyl, pyrimidinyl, substituted aryl, substituted heteroaryl, substituted thiophene, substituted pyridyl, substituted thiazolyl, substituted isoxazolyl, substituted oxazolyl, cycloaryl, cycloheteroaryl, quinolinyl, isoquinolinyl, substituted cycloaryl, substituted cycloheteroaryl, substituted quinolinyl, substituted isoquinolinyl, multi-ring cycloaryl, multi-ring cycloheteroaryl, benzyl, heteroaryl-methyl, substituted benzyl, substituted heteroaryl-methyl alkyl, dialkylaminoalkyl, cycloalkyl, cycloalkyl containing 1-3 heteroatoms, substituted cycloalkyl, multiring cycloalkyl containing 1-3 heteroatoms, multi-ring cycloalkyl, multiring cycloalkyl containing 1-3 heteroatoms, fused-ring aliphatic, fused-ring aliphatic containing 1-3 heteroatoms, cyclopropyl, substituted cyclopropyl, cyclobutyl, substituted cyclobutyl, cyclopentyl,

-2-

09/983,054

Filed

October 16, 2001

pyrrole, piperidine, substituted cyclopentyl, cyclohexyl, substituted cyclohexyl, cycloheptyl, substituted cycloheptyl, bicycloheptyl, substituted pyrrole, substituted piperidine, bicyclooctyl, bicyclononyl, substituted bicycloalkenyl, adamantyl, and substituted adamantyl, heterocyclic ring, and substituted heterocyclic ring;

wherein at least one of R_1 and R_2 are aromatic groups or heteroaromatic groups; and

wherein R₁ and R₂ cannot both be phenyl groups.

- 2. (Previously presented) The pharmaceutical composition of Claim 1, wherein the substituent is selected from the group consisting of alkyl, aryl, CF₃, CH₃, OCH₃, OH, CN, CONH₂, CONHR, CONR₁R₂, COOR and COOH.
- 3. (Original) The pharmaceutical composition of Claim 1, further comprising at least one additional ingredient which is active in reducing at least one symptom associated with said allergic reaction.
- 4. (Original) The pharmaceutical composition of Claim 3, wherein said at least one additional ingredient is selected from the group consisting of a short-acting β_2 -adrenergic agonist, a long-acting β_2 -adrenergic agonist, an antihistamine, a phosphodiesterase inhibitor, an anticholinergic agent, a corticosteroid, an inflammatory mediator release inhibitor and a leukotriene receptor antagonist.
- 5. (Currently amended) The pharmaceutical composition of Claim 1, wherein the compound is selected from the group consisting of:

Appl. No. Filed

09/983,054

October 16, 2001

09/983,054

Filed

October 16, 2001

6/1/04

6. (Previously presented) A method for treating or preventing an allergic reaction in a mammal wherein said reaction is caused by an increase in IgE levels comprising administering an IgE-suppressing amount of at least one compound of following formula:

Genus A,

wherein X and Y are independently selected from the group consisting of H, alkyl, alkoxy, aryl, substituted aryl, hydroxy, halogen, amino, alkylamino, nitro, cyano, CF₃, OCF₃. CONH₂, CONHR and NHCOR₁;

wherein R is selected from the group consisting of H, CH₃, C₂H₅, C₃H₇, C₄H₉, CH₂Ph, CH₂C₆H₄-F(p-), COCH₃, CO₂CH₂CH₃, aminoalkyl and dialkylaminoalkyl; and

wherein R_1 is a heterocyclic ring containing one heteroatom or substituted heterocyclic ring containing one heteroatom; and

wherein R₂ is selected from the group consisting of aryl, heteroaryl, thiophene, pyridyl, thiazolyl, isoxazolyl, oxazolyl, pyrimidinyl, substituted aryl, substituted heteroaryl, substituted thiophene, substituted pyridyl, substituted thiazolyl, substituted isoxazolyl, substituted oxazolyl, cycloaryl, cycloheteroaryl, quinolinyl, isoquinolinyl, substituted cycloaryl, substituted cycloheteroaryl, substituted quinolinyl, substituted isoquinolinyl, multi-ring cycloaryl, multi-ring cycloheteroaryl, benzyl, heteroaryl-methyl, substituted benzyl, substituted heteroaryl-methyl alkyl, dialkylaminoalkyl, cycloalkyl, cycloalkyl containing 1-3 heteroatoms, substituted cycloalkyl, multiring cycloalkyl containing 1-3 heteroatoms, multi-ring cycloalkyl, multiring cycloalkyl containing 1-3 heteroatoms, fused-ring aliphatic, fused-ring aliphatic containing 1-3 heteroatoms, cyclopropyl, substituted cyclopropyl, cyclobutyl, substituted cyclopentyl, pyrrole, piperidine, substituted cyclopentyl, substituted cyclohexyl, substituted cyclohexyl, substituted pyrrole, substituted

09/983,054

Filed

October 16, 2001

piperidine, bicyclooctyl, bicyclononyl, substituted bicycloalkenyl, adamantyl, and substituted adamantyl, heterocyclic ring, and substituted heterocyclic ring;

wherein at least one of R₁ and R₂ are aromatic groups or heteroaromatic groups.

- 7. (Original) The method of Claim 6, further comprising administering in conjunction with at least one additional ingredient which is active in reducing at least one symptom associated with said allergic reaction.
- 8. (Original) The method of Claim 7, wherein said additional ingredient is selected from the group consisting of a short-acting β_2 -adrenergic agonist, a long-acting β_2 -adrenergic agonist, an antihistamine, a phosphodiesterase inhibitor, an anticholinergic agent, a corticosteroid, an inflammatory mediator release inhibitor and a leukotriene receptor antagonist.
- 9. (Currently amended) The method of Claim 6, wherein the compound is selected from the group consisting of:

HO
$$\stackrel{\text{OH}}{\stackrel{\text{N}}}{\stackrel{\text{N}}{\stackrel{\text{N}}{\stackrel{\text{N}}{\stackrel{\text{N}}}{\stackrel{\text{N}}{\stackrel{\text{N}}}{\stackrel{\text{N}}}{\stackrel{\text{N}}{\stackrel{\text{N}}}{\stackrel{\text{N}}}{\stackrel{\text{N}}{\stackrel{\text{N}}}}{\stackrel{\text{N}}{\stackrel{\text{N}}}}{\stackrel{\text{N}}{\stackrel{\text{N}}}}{\stackrel{\text{N}}}{\stackrel{\text{N}}}}}{\stackrel{\text{N}}{\stackrel{\text{N}}}}\stackrel{\text{N}}{\stackrel{\text{N}}}}}{\stackrel{\text{N}}}\stackrel{\text{N}}{\stackrel{\text{N}}}}}{\stackrel{\text{N}}}\stackrel{\text{N}}}{\stackrel{\text{N}}}}\stackrel{\text{N}}}{\stackrel{\text{N}}}}\stackrel{\text{N}}}{\stackrel{\text{N}}}}\stackrel{\text{N}}}{\stackrel{\text{N}}}}\stackrel{\text{N}}}{\stackrel{\text{N}}}}\stackrel{\text{N}}}{\stackrel{\text{N}}}}\stackrel{\text{N}}}{\stackrel{\text{N}}}}\stackrel{\text{N}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}\stackrel{\text{N}}}\stackrel{\text{N}}}\stackrel{\text{N}}$$

09/983,054

Filed

October 16, 2001

 $\begin{array}{c} & & \\$

10. (Previously presented) A method for treating or preventing asthma in a mammal comprising administering an IgE-suppressing amount of at least one compound of following formula:

Genus A,

wherein X and Y are independently selected from the group consisting of H, alkyl, alkoxy, aryl, substituted aryl, hydroxy, halogen, amino, alkylamino, nitro, cyano, CF_3 , OCF_3 . $CONH_2$, CONHR and $NHCOR_1$;

6/1/04

09/983,054

Filed

October 16, 2001

wherein R is selected from the group consisting of H, CH₃, C₂H₅, C₃H₇, C₄H₉, CH₂Ph, CH₂C₆H₄-F(p-), COCH₃, CO₂CH₂CH₃, aminoalkyl and dialkylaminoalkyl; and

wherein R₁ is a heterocyclic ring containing one heteroatom or substituted heterocyclic ring containing one heteroatom; and

wherein R₂ is selected from the group consisting of aryl, heteroaryl, thiophene, pyridyl, thiazolyl, isoxazolyl, oxazolyl, pyrimidinyl, substituted aryl, substituted heteroaryl, substituted thiophene, substituted pyridyl, substituted thiazolyl, substituted isoxazolyl, substituted oxazolyl, cycloaryl, cycloheteroaryl, quinolinyl, isoquinolinyl, substituted cycloaryl, substituted cycloheteroaryl, substituted quinolinyl, substituted isoquinolinyl, multi-ring cycloheteroaryl, benzyl, heteroaryl-methyl, substituted benzyl, substituted heteroaryl-methyl alkyl, dialkylaminoalkyl, cycloalkyl, cycloalkyl containing 1-3 heteroatoms, substituted cycloalkyl, substitute cycloalkyl containing 1-3 heteroatoms, multi-ring cycloalkyl, multiring cycloalkyl containing 1-3 heteroatoms, fused-ring aliphatic, fused-ring aliphatic containing 1-3 heteroatoms, cyclopropyl, substituted cyclopropyl, cyclobutyl, substituted cyclobutyl, pyrrole, piperidine, substituted cyclopentyl, cyclohexyl, substituted cyclohexyl, cycloheptyl, substituted pyrrole, substituted piperidine, bicyclooctyl, bicyclononyl, substituted bicycloalkenyl, adamantyl, and substituted adamantyl, heterocyclic ring, and substituted heterocyclic ring;

wherein at least one of R_1 and R_2 are aromatic groups or heteroaromatic groups.

- 11. (Original) The method of Claim 10 further comprising administering in conjunction with at least one additional ingredient which is active in reducing at least one symptom associated with said allergic reaction.
- 12. (Original) The method of Claim 11, wherein said additional ingredient is selected from the group consisting of a short-acting β_2 -adrenergic agonist, a long-acting β_2 -adrenergic agonist, an antihistamine, a phosphodiesterase inhibitor, an anticholinergic agent, a corticosteroid, an inflammatory mediator release inhibitor and a leukotriene receptor antagonist.

Appl. No. Filed

09/983,054

October 16, 2001

13. (Currently amended) The method of Claim 10, wherein the compound is selected from the group consisting of:

09/983,054

Filed

October 16, 2001

6/1/24

14. (Previously presented)

The pharmaceutical composition of Claim 1,

wherein R₂ is aliphatic.

15. (Previously presented) The pharmaceutical composition of Claim 1, wherein the compound is selected from the group consisting of

Appl. No. Filed

09/983,054

October 16, 2001

(1239) (1240) (1258)

16. (Previously presented) The pharmaceutical composition of Claim 1, wherein the compound is